

C L A I M S

1. Pressure-fluid driven device for generating a reciprocating movement and including a first (5) and a second (3) axially relatively movable part, wherein a working chamber (7) is intended to be alternatively pressurized so as to drive the parts in a movement relative to each other and depressurized, wherein the first part (5) is provided with a first channel (6) for supply of driving fluid to the working chamber (7) and the second part (3) is provided with a second channel (15) for discharge of fluid from the working chamber (7), and wherein a valve arrangement (8), having valve elements which are being movable relative to the parts, is arranged to control the fluid flow in the first as well as the second channel in dependence of the relative positions of the parts, and thereby the pressurization of the working chamber, characterized in that the valve arrangement includes control means connected to at least one of the two valve elements so that the valve elements are axially separated from each other such that a fluid inlet into the working chamber (7) of the first channel is separated from a fluid discharge from the working chamber (7) into the second channel (15).
2. Device according to claim 1, characterized in that the valve elements are comprised of a first valve element (10) for controlling the fluid flow in the first channel (6) and a second valve element (9) for controlling the fluid flow in the second channel (15).
3. Device according to claim 2, characterized in that the first valve element (10) in operation is arranged to be brought into sealing co-operation (13) with the first

channel (6) by the fluid pressure in a position intended for sealing co-operation.

4. Device according to claim 2 or 3,

5 c h a r a c t e r i z e d in that the second valve element (9) in operation is arranged to be brought into a sealing co-operation (12) with the second channel (15) by fluid pressure in a position intended for sealing co-operation.

10 5. Device according to any of the previous claims, c h a r a c t e r i z e d in that the valve elements are connected (11) to each other by said control means so as to form a valve body (8).

15 6. Device according to any of the previous claims, c h a r a c t e r i z e d in that the valve elements are arranged so as to allow a relative movement between each other.

20 7. Device according to claim 6, c h a r a c t e r i z e d in that said control means is elastically flexible.

8. Device according to any of the previous claims, c h a r a c t e r i z e d in that at least one of the valve
25 elements is elastically flexible.

9. Device according to any of the previous claims, c h a r a c t e r i z e d in that the first (5) and the second (3) parts are arranged in a housing (2) including an
30 inlet and an outlet for pressure-fluid and that the first as well as the second part is movable with respect to the housing.

10. Device according to claim 9, c h a r a c t e r i z e d in that the two movable parts (5;3) are arranged sealingly against the housing (2) in order to form the working chamber (7).

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11. Device according to any of the previous claims, c h a r a c t e r i z e d in that a first force accumulator is coupled to one of the parts and is arranged to be put under increased resilient force producing load as a response to movement of that part in a first direction which is against the working chamber for that part and that a second force accumulator is coupled to the other part and is arranged to be put under increased resilient force producing load as a response to movement of that other part in said first direction.

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12. Device according to any of the previous claims, wherein the valve elements co-operate with valve element reception means,

20 c h a r a c t e r i z e d in that at least one of the valve element reception means is flexible.

13. Pneumatic tool including a device according to any of the claims 1 - 12.

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